Georgia Department of Natural Resources 2 Martin Luther King, Jr. Drive, S.E., Suite 1152 East Tower, Atlanta, Georgia 30334-9000

Martin Luther King, Jr. Drive, S.E., Suite 1152 East Tower, Atlanta, Georgia 30334-9000

Mark Williams, Commissioner
F. Allen Barnes, Director
Environmental Protection Division
404/656-4713

February 7, 2011

Mr. Thomas Fry Chief, Environmental Division IMSE-STW-PWE 1550 Frank Cochran Drive Fort Stewart, Georgia 31314

RE: NPDES Permit No. GA0004308

Dear Mr. Fry:

Pursuant to the Georgia Water Quality Control Act, as amended; the Federal Clean Water Act, as amended; and the Rules and Regulations promulgated thereunder, we have issued the attached National Pollutant Discharge Elimination System (NPDES) permit for the specified wastewater treatment facility.

Please be advised that on and after the effective date indicated in the attached NPDES permit, the permittee must comply with all the terms, conditions and limitations of this permit.

Sincerely,

F. Allen Barnes

Director

FAB:al

cc: Coastal District Office

PERMIT NO. GA0004308

STATE OF GEORGIA DEPARTMENT OF NATURAL RESOURCES ENVIRONMENTAL PROTECTION DIVISION

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the State Act; the Federal Water Pollution Control Act, as amended (33 U.S. C. 1251 et seq.), hereinafter called the Federal Act; and the Rules and Regulations promulgated pursuant to each of these Acts,

UNITED STATES DEPARTMENT OF THE ARMY Headquarters, Fort Stewart Fort Stewart, Georgia 31314

is authorized to discharge from a facility located at

Fort Stewart, Liberty and Bryan Counties, Georgia

to receiving waters

Tributaries to the Canoochee River Ogeechee River Basin

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II and III hereof.

This permit shall become effective on February 7, 2011.

This permit and the authorization to discharge shall expire at midnight January 31, 2016.

Signed this 7th day of February 2011.

Director,

Environmental Protection Division

Page 2 of 14 Permit No. GA0004308

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting through January 31, 2016, the permittee is authorized to discharge from outfall serial number 001 – Evans Field Package Wastewater Treatment Plant, Fort Stewart.

Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations					, , , , , , , , , , , , , , , , , , ,	
Effluent Characteristics	Mass Based (lbs/day)		Conc. Based (mg/l)		Monitoring Requirements		
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measureme nt Frequency	Sample Type	Sample Location
Flow (MGD)	0.035	0.035			Daily	Flow meter	Effluent
BOD₅	**		5.0	7.5	Monthly	24-hr Composite	Effluent
TSS			30	45	Monthly	24-hr Composite	Effluent
Fecal Coliform Bacteria (number per 100 ml of sample)			200	400	Monthly	Grab	Effluent
Ammonia Nitrogen			1.0	1.5	Monthly	24-hr Composite	Effluent
Dissolved Oxygen			6.0*		Monthly	Grab	Effluent

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by a grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

 The dissolved oxygen shall be 6.0 mg/l or greater and will be monitored monthly by grab sample. Monthly results shall be sent with the monthly Operation Monitoring Reports.

Page 3 of 14 Permit No. GA0004308

2. During the period beginning on the effective date of this permit and lasting through January 31, 2016, the permittee is authorized to discharge from outfall serial number 002 – TAC-X Package Wastewater Treatment Plant, Fort Stewart.

Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations							
Effluent Characteristics	Mass Based (lbs/day)		Conc. Based (mg/l)		Monitoring Requirements			
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location	
Flow (MGD)	0.035	0.035			Daily	Flow meter	Effluent	
BOD ₅		440 EM	5.0	7.5	Monthly	24-hr Composite	Effluent	
TSS			30	45	Monthly	24-hr Composite	Effluent	
Fecal Coliform Bacteria (number per 100 ml of sample)			200	400	Monthly	Grab	Effluent	
Ammonia Nitrogen			1.0	1.5	Monthly	24-hr Composite	Effluent	
Dissolved Oxygen		+7 NP	6.0*		Monthly	Grab	Effluent	

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by a grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

* The dissolved oxygen shall be 6.0 mg/l or greater and will be monitored monthly by grab sample. Monthly results shall be sent with the monthly Operation Monitoring Reports.

Sampling shall be performed during normal production days.

Page 4 of 14 Permit No. GA0004308

3. During the period beginning on the effective date of this permit and lasting through January 31, 2016, the permittee is authorized to discharge from outfall serial number 003 – Industrial Waste Treatment. (to Mill Creek)

	Discharge Limitations							
Effluent Characteristics	Mass Based (lbs/day)		Conc. Based (mg/l)		Monitoring Requirements			
	Daily Avg.	Daily Max.	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type	Sample Location	
Flow (MGD)	0.5	1.5			Daily	Flow meter	Effluent	
BOD₅			5.0	7.5	2/Month	Grab	Effluent	
TSS			30	45	2/Month	Grab	Effluent	
Phenols			0.25	0.50	2/Month	Grab	Effluent	
Oil and Grease			10	15	2/Month	Grab	Effluent	
Dissolved Oxygen			6.0*		Monthly	Grab	Effluent	

Such discharges shall be limited and monitored by the permittee as specified below:

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by a grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

* The dissolved oxygen shall be 6.0 mg/l or greater and will be monitored monthly by grab sample. Monthly results shall be sent with the monthly Operation Monitoring Reports.

Sampling shall be performed during normal production days.

Page 5 of 14 Permit No. GA0004308

B. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

N/A

 No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

Note:

EPD as used herein means the Environmental Protection Division of the Department of Natural Resources.

C. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

Monitoring results obtained during the previous one month shall be summarized for each month and reported on an Operation Monitoring Report (Form WQ 1.45). Forms other than Form WQ 1.45 may be used upon approval by EPD. These forms and any other required reports and information shall be completed, signed and certified by a principal executive officer or ranking elected official, or by a duly authorized representative of that person, and submitted to EPD, postmarked no later than the 15th day of the month following the reporting period. Signed copies of these and all other reports required herein shall be submitted to the following address:

Environmental Protection Division Coastal District Office - Brunswick 400 Commerce Center Drive Brunswick, Georgia 31523

All instances of noncompliance not reported under Part I. B., C., and D. shall be reported at the time the operation monitoring report is submitted.

Definitions

a. The "daily average" mass means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days sampled during the calendar month when the measurements were made.

Page 6 of 14 Permit No. GA0004308

- b. The "daily maximum" mass means the total discharge by weight during any calendar day.
- c. The "daily average" concentration means the arithmetic average of all the daily determinations of concentrations made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample.
- d. The "daily maximum" concentration means the daily determination of concentration for any calendar day.
- e. For the purpose of this permit, a calendar day is defined as any consecutive 24-hour period.
- f. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- g. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources, which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Test Procedures

Monitoring must be conducted according to test procedures approved pursuant to 40 CFR Part 136 unless other test procedures have been specified in this permit.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date, and time of sampling or measurements, and the person(s) performing the sampling or the measurements;
- b. The dates the analyses were performed, and the person(s) who performed the analyses;
- c. The analytical techniques or methods used; and
- d. The results of all required analyses.

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Operation Monitoring Report Form (WQ 1.45). Such increased monitoring frequency shall also be indicated. EPD may require by written notification more frequent monitoring of other pollutants not required in this permit.

Page 7 of 14 Permit No. GA0004308

7. Records Retention

The permittee shall retain records of all monitoring information, including all records of analyses performed, calibration and maintenance of instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of EPD at any time.

8. Penalties

The Federal Clean Water Act and the Georgia Water Quality Control Act provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine or by imprisonment, or by both. The Federal Clean Water Act and the Georgia Water Quality Control Act also provide procedures for imposing civil penalties which may be levied for violations of the Act, any permit condition or limitation established pursuant to the Act, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director of EPD.

D. MANAGEMENT REQUIREMENTS

1. Change in Discharge

- a. Advance notice to EPD shall be given of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements. Any anticipated facility expansions, production increases, or process modifications must be reported by submission of a new NPDES permit application or, if such changes will not violate the effluent limitations specified in this permit, by notice to EPD of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.
- b. All existing manufacturing, commercial, mining, and silviculture dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has occurred or will occur which would result in the discharge, ona routine or frequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (I) 100 μ g/l, (ii) five times the maximum concentration reported for that pollutant in the permit application, or (iii) 200 μ g/l for acrolein and acrylonitrile, 500 μ g/l for 2,4 dinitrophenol and for 2-methyl-4-6-dinitrophenol, or 1 mg/l antimony.
- c. All existing manufacturing, commercial, mining, and silvicultural dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has occurred or will occur which would result in any discharge on a non-routine or infrequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (I) 500 µg/l, (ii) ten times the maximum concentration reported for that pollutant in the permit application, or (iii) 1 mg/l antimony.

Page 8 of 14 Permit No. GA0004308

2. Noncompliance Notification

If, for any reason, the permittee does not comply with, or will be unable to comply with any effluent limitation specified in this permit, the permittee shall provide EPD with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:

- a. A description of the discharge and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.

3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

Bypassing

- a. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to EPD at least 10 days (if possible) before the date of the bypass. The permittee shall submit notice of any unanticipated bypass with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:
 - 1. A description of the discharge and cause of noncompliance; and
 - 2. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying discharge.

Page 9 of 14 Permit No. GA0004308

b. Any diversion or bypass of facilities covered by this permit is prohibited, except (I) where unavoidable to prevent loss of life, personal injury, or severe property damage; (ii) there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if the permittee could have installed adequate back-up equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and (iii) the permittee submitted a notice as required above. The permittee shall operate the treatment works, including the treatment plant and total sewer system, to minimize discharge of the pollutants listed in Part I of this permit from combined sewer overflows or bypasses. Upon written notification by EPD, the permittee may be required to submit a plan and schedule for reducing bypasses, overflows, and infiltration in the system.

6. Sludge Disposal Requirements

Hazardous sludge shall be disposed of in accordance with the regulations and guidelines established by EPD pursuant to the Federal Clean Water Act (CWA) and the Resource Conservation and Recovery Act (RCRA). For land application of non-hazardous sludge, the permittee shall comply with any applicable criteria outlined in EPD's "Guidelines for Land Application of Municipal Sludges." Prior to disposal of sludge by land application, the permittee shall submit a proposal to EPD for approval in accordance with applicable criteria in EPD's "Guidelines for Land Application of Municipal Sludges." Upon evaluation of the permittee's proposal, EPD may require that more stringent control of this activity is required. Upon written notification, the permittee shall submit to EPD for approval, a detailed plan of operation for land application of sludge. Upon approval, the plan will become a part of the NPDES permit. Disposal of non-hazardous sludge by other means, such as landfilling, must be approved by EPD.

7. Sludge Monitoring Requirements

The permittee shall develop and implement procedures to insure adequate year-round sludge disposal. The permittee shall monitor the volume and concentration of solids removed from the plant. Records shall be maintained which document the quantity of solids removed from the plant. The ultimate disposal of solids shall be reported monthly (in the unit of lbs/day) to EPD with the Operation Monitoring Report Forms required under Part I (C)(2) of this permit.

8. Power Failures

Upon the reduction, loss, or failure of the primary source of power to said water pollution control facilities, the permittee shall use an alternative source of power if available to reduce or otherwise control production and/or all discharges in order to maintain compliance with the effluent limitations and prohibitions of this permit.

If such alternative power source is not in existence, and no date for its implementation appears in Part I, the permittee shall halt, reduce or otherwise control production and/or all discharges from wastewater control facilities upon the reduction, loss, or failure of the primary source of power to said wastewater control facilities.

Page 10 of 14 Permit No. GA0004308

E. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials:

- a. To enter upon the permittee's premises where a regulated activity or facility is located or conducted or where any records are required to be kept under the terms and conditions of this permit; and
- b. At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and to sample any substance or parameters in any location.

2. Transfer of Ownership or Control

A permit may be transferred to another person by a permittee if:

- a. The permittee notifies the Director in writing of the proposed transfer at least thirty (30) days in advance of the proposed transfer;
- b. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) is submitted to the Director at least thirty (30) days in advance of the proposed transfer; and
- c. The Director, within thirty (30) days, does not notify the current permittee and the new permittee of EPD's intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

3. Availability of Reports

Except for data deemed to be confidential under O.C.G.A. § 12-5-26 or by the Regional Administrator of the EPA under the Code of Federal Regulations, Title 40, Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at an office of EPD. Effluent data, permit applications, permittee's names and addresses, and permits shall not be considered confidential.

4. Permit Modification

After written notice and opportunity for a hearing, this permit may be modified, suspended, revoked or reissued in whole or in part during its term for cause including, but not limited to, the following:

Page 11 of 14 Permit No. GA0004308

- a. Violation of any conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to fully disclose all relevant facts:
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or
- d. To comply with any applicable effluent limitation issued pursuant to the order the United States District Court for the District of Columbia issued on June 8, 1976, in <u>Natural Resources Defense Council, Inc. et.al.</u> v. <u>Russell E. Train</u>, 8 ERC 2120(D.D.C. 1976), if the effluent limitation so issued:
 - (1) is different in conditions or more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.

5. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established pursuant to Section 307(a) of the Federal Clean Water Act for toxic pollutants, which are present in the discharge within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Federal Clean Water Act.

8. Water Quality Standards

Nothing in this permit shall be construed to preclude the modification of any condition of this permit when it is determined that the effluent limitations specified herein fail to achieve the applicable State water quality standards.

9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

Page 12 of 14 Permit No. GA0004308

10. Expiration of Permit

Permittee shall not discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the agency authorized to issue permits no later than 180 days prior to the expiration date.

11. Contested Hearings

Any person who is aggrieved or adversely affected by an action of the Director of EPD shall petition the Director for a hearing within thirty (30) days of notice of such action.

12. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

13. Best Management Practices

The permittee will implement best management practices to control the discharge of hazardous and/or toxic materials from ancillary manufacturing activities. Such activities include, but are not limited to, materials storage areas, in-plant transfer, process and material handling areas; loading and unloading operations; plant site runoff; and sludge and waste disposal areas.

14. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

15. Duty to Provide Information

- a. The permittee shall furnish to the Director of EPD, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, orterminating this permit or to determine compliance with this permit. The permittee shall also furnish upon request copies of records required to be kept by this permit.
- b. When the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts and information.

16. Upset Provisions

Provisions of 40 CFR 122.41(n)(1)-(4), regarding "Upset" shall be applicable to any civil, criminal, or administrative proceeding brought to enforce this permit.

Page 13 of 14 Permit No. GA0004308

F. PREVIOUS PERMITS

1. All previous State water quality permits issued to this facility, whether for construction or operation, are hereby revoked by the issuance of this permit. This action is taken to assure compliance with the Georgia Water Quality Control Act, as amended, and the Federal Clean Water Act, as amended. Receipt of the permit constitutes notice of such action. The conditions, requirements, terms and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

G. SPECIAL REQUIREMENTS

- 1. Mercury Minimization Plan
 - a. The permittee shall monitor for mercury in the effluent (outfall serial numbers 001, 002, and 003) using EPA Method 1631 a minimum of twice per year. EPD will evaluate this data to determine the need for the development of a mercury minimization plan.
 - b. Should EPD determine that a mercury minimization plan is required, the permittee shall develop an approvable mercury minimization plan upon written notification by EPD. The goal of the plan is to reduce the concentration of mercury in the effluent to the water quality target (9.8 ng/l) or as close as possible to it. The plan shall at a minimum address the following items:
 - 1. The permittee shall identify current and potential sources that contribute mercury to the permitted discharge. The source identification shall be completed and submitted to EPD within 3 months.
 - 2. The permittee shall monitor the identified current sources to confirm and quantify the mercury contribution from the sources identified in item a. above. This work is to be completed and the results submitted to EPD within 6 months.
 - 3. The permittee shall identify potential methods for reducing and eliminating mercury, including housekeeping practices, material substitution, process modifications, materials recovery, spill control and collection, waste recycling, pretreatment, employee education, laboratory practices, and disposal practices. The permittee shall evaluate the feasibility of the implementation of the identified methods. The permittee shall submit a report containing all the identified potential methods for reducing/eliminating mercury within 12 months. This report shall specify which potential methods are appropriate, feasible and cost effective. These methods are to be implemented immediately.
 - 4. The permittee shall submit a report of progress to EPD 18 months after the notification date and every 6 months thereafter for the term of the permit. These reports shall summarize the results of the minimization plan.

Page 14 of 14 Permit No. GA0004308

H. BIOMONITORING AND TOXICITY REDUCTION REQUIREMENTS

The permittee shall comply with effluent standards or prohibitions established by section 307(a) of the Federal Act and with chapter 391-3-6-.03(5) of the State Rules and may not discharge toxic pollutants in concentrations or combinations that are harmful to humans, animals, or aquatic life.

If toxicity is suspected in the effluent, the EPD may require the permittee to perform any of the following actions:

- a. Acute bio-monitoring tests;
- b. Chronic bio-monitoring tests;
- c. Stream studies;
- d. Priority pollutant analyses;
- e. Toxicity reduction evaluations (TRE); or
- f. Any other appropriate study.

The EPD will specify the requirements and methodologies for performing any of these tests or studies. Unless other concentrations are specified by the EPD, the critical concentration used to determine toxicity in bio-monitoring tests will be the effluent in-stream wastewater concentration (IWC) based on the representative plant flow of the facility and the critical low flow of the receiving stream (7Q10). The endpoints that will be reported are the effluent concentration that is lethal to 50% of the test organisms (LC50) if the test is for acute toxicity, and the no observed effect concentration (NOEC) of effluent if the test isfor chronic toxicity.

The permittee must eliminate effluent toxicity and supply the EPD with data and evidence to confirm toxicity elimination. When approved by the EPD, all study plans and TRE plans will become part of the requirements of this permit.